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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/894,661	06/28/2001	Kenichi Higuchi	3815/125	6964

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EXAMINER

FAN, CHIEH M

ART UNIT PAPER NUMBER

2634

DATE MAILED: 09/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/894,661

Applicant(s)

HIGUCHI ET AL.

Examiner

Chieh M Fan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 040403,062003,042204.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The applicants filed an information disclosure statement on 2/23/2004 to request the references WO00/27050, EP0715423, EP1128578, EP0853393 be made of record in the file, but did not provide copies of the references and PTO Form 1449. However, the above-identified references are provided and listed in the IDS filed 4/22/2004. Therefore the above-identified references have been considered.

Priority

2. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on 6/29/2000. Although the applicants indicated that the certified copy of the priority document was attached in the transmittal letter sent 06/28/01, the examiner cannot find such certified copy of the JAPAN 2000-197375 application as required by 35 U.S.C. 119(b).

Claim Objections

3. Claims 1-10 are objected to because of the following informalities:

Regarding claim 1, "the ratio between the target received signal power value and the interference power value" in lines 8-9 should be changed to --- a ratio between a target received signal power value and an interference power value --- (emphasis added); and "target reception power value" in the last line should be changed to --- corrected target reception power value". Further, it appears that "settling" in line 12 should be changed to --- setting ---.

Regarding claim 2, "the amount" in line 3 and in line 5 should be changed to --- an amount ---.

Regarding claim 3, "a site diversity" in line 8 should be changed to --- the site diversity ---; "the predetermined set target synthesized reception error rate" in line 12 should be changed to --- a predetermined set target synthesized reception error rate ---; and "a predetermined target value" in lines 18-19 should be changed to --- the predetermined target value ---.

Regarding claim 4, "the correction amount" in line 3 should be changed to --- a corrected amount ---.

Regarding claim 5, "a comparision means" in line 8 should be changed to --- a comparison means ---; "the ratio between the target received signal power value and the interference power value" in lines 11-13 should be changed to --- a ratio between a target received signal power value and an interference power value ---; and "the target reception power value" in lines 20-21 should be changed to --- the corrected target reception power value". Further, it appears that "the base station" in line 23 should be changed to --- the mobile station ---.

Regarding claim 6, "the amount" in line 3 and in line 5 should be changed to --- an amount ---.

Regarding claim 7, "the predetermined set target synthesized reception error rate" in lines 13-14 should be changed to --- a predetermined set target synthesized reception error rate ---; and "a predetermined target value" in lines 18-19 should be changed to --- the predetermined target value ---.

Regarding claim 8, "the correction amount" in line 3 should be changed to --- a corrected amount ---.

Regarding claim 9, "a defection means" in line 5 should be changed to --- a detection means ---; "the ratio between the target received signal power value and the interference power value" in lines 10-12 should be changed to --- a ratio between a target received signal power value and an interference power value ---; and "the target reception power value" in lines 19-20 should be changed to --- the corrected target reception power value". Further, it appears that "the base station" in line 22 should be changed to --- the mobile station ---.

Regarding claim 10, "a predetermined target value" in lines 13-14 should be changed to --- the predetermined target value ---.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 3, 4, 7 and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 3, "the result of the comparison" in line 15 is indefinite. Claim 3 recites a step of comparing in lines 11-13 that generates the result of comparison. However, claim 1 also recites the step of comparing in lines 6-7 that generates another result of comparison (see lines 10-11 of claim 1). It is therefore not clear the recited result of comparison is generated by which step of comparing.

Regarding claim 7, "the result of the comparison" in lines 16-17 is indefinite. Claim 7 recites a comparison means in lines 12-14 that generates the result of comparison. However, claim 5 also recites a comparison means in lines 8-10 that generates another result of comparison (see line 14 of claim 5). It is therefore not clear the recited result of comparison is generated by which step of comparing.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 2, 5, 6, 9 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Weaver et al. (EP 0715423, listed in the IDS filed 4/22/04).

Regarding claim 1, Weaver et al. teaches a transmission power control method performing a broad-band spread transmission by using a receiver (abstract, Figs. 1-3), and comprising the steps of:

detecting a reception error rate of a received signal (302 in Fig. 3);

comparing the detected reception error rate and a predetermined target reception error rate (304 in Fig. 3);

correcting the ratio between the target received signal power value and the interference power value, or a target reception power value based on the result of the comparison (210 in Fig. 2; 308, 314 in Fig. 3); and

settling a transmission control signal so that the transmission power can be controlled to a predetermined target value, based on the corrected ratio between the target received signal power value and the interference power value, or based on the target reception power value (110, 114, 116 in Fig. 1; 204, 206, 110 in Fig. 2).

Regarding claim 2, wherein said correcting process comprising: varying the amount of correction of the ratio between the target received signal power value and the interference power value, or the amount of correction of the target reception power value (308, 310 in Fig. 3), according to the difference between the detected reception error rate and the target reception error rate (304 in Fig. 3).

Regarding claim 5, Weaver et al. teaches a mobile communication system controlling transmission power of a transmitting signal between a base station and a

mobile station by a wide-band spread transmission (abstract, Figs. 1-3), and the system comprising:

a detection means (302 in Fig. 3) for detecting a reception error rate of a received signal from the mobile station;

a comparison means (304 in Fig. 3) for comparing the detected reception error rate and a predetermined target reception error rate;

a correction means (210 in Fig. 2; 308, 314 in Fig. 3) for correcting the ratio between the target received signal power value and the interference power value, or the target reception power based on the result of the comparison;

a control means (108 in Fig. 1; 110, 114, 116 in Fig. 1; 204, 206, 110 in Fig. 2) for setting a transmission control signal so that the transmission power of the mobile station can be controlled to a predetermined target value, based on the corrected ratio between the target received signal power value and the interference power value, or based on the target reception power value;

a transmission means (114 in Fig. 1) for transmitting the set control signal to the mobile station; and

a transmission power control means (116, 118 in Fig. 1) for analyzing the received control signal from the base station, and controlling the transmission power based on the result of the analysis.

Regarding claim 6, wherein the correction means comprising: varying the amount of correction of the ratio between the target received signal power and the interference power value, or the amount of correction of the target reception power value (308, 310

in Fig. 3), according to the difference between the detected reception error rate and the target reception error rate (304 in Fig. 3).

Regarding claim 9, Weaver et al. teaches a base station controlling transmission power of a transmitting signal from a mobile station by a wide-band spread transmission (abstract, Figs. 1-3), and the base station comprising:

- a detection means (302 in Fig. 3) for detecting a reception error rate of a received signal;

- a comparison means (304 in Fig. 3) for comparing the detected reception error rate and a predetermined target reception error rate;

- a correction means (210 in Fig. 2; 308, 314 in Fig. 3) for correcting the ratio between the target received signal power value and the interference power value, or the target reception power based on the result of the comparison;

- a control means (108 in Fig. 1; 110, 114, 116 in Fig. 1; 204, 206, 110 in Fig. 2) for setting a transmission control signal so that the transmission power of the mobile station can be controlled to a predetermined target value, based on the corrected ratio between the target received signal power value and the interference power value, or based on the target reception power value; and

- a transmission means (114 in Fig. 1) for transmitting the set control signal to the mobile station.

Regarding claim 10, Weaver et al. teaches a mobile station controlling transmission power of a transmitting signal from a base station by a wide-band

transmission, and the mobile station comprising: a control signal outputted from the base station of claim 9 above,

an extract means (116 in Fig. 1) for analyzing the outputted control signal transmitted from the base station and extracting a transmission power control information included in the control signal; and

a transmission power control means (118 in Fig. 1) for controlling the transmission power so that the transmission power can be controlled to a predetermined transmission target value based on the extracted power control information.

8. Claims 1, 5, 9 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Dohi et al. (EP 0853393, listed in the IDS filed 4/22/04).

Regarding claim 1, Dohi et al. teaches a transmission power control method performing a broad-band spread transmission by using a receiver (Fig. 3, claim 1), and comprising the steps of:

detecting a reception error rate of a received signal (10 in Fig. 3);

comparing the detected reception error rate and a predetermined target reception error rate (11 in Fig. 3);

correcting the ratio between the target received signal power value and the interference power value, or a target reception power value based on the result of the comparison (12 in Fig. 3); and

settling a transmission control signal so that the transmission power can be controlled to a predetermined target value, based on the corrected ratio between the target received signal power value and the interference power value, or based on the target reception power value (7, 13 in Fig. 3).

Regarding claim 5, Weaver et al. teaches a mobile communication system controlling transmission power of a transmitting signal between a base station and a mobile station by a wide-band spread transmission (Fig. 3, claim 1), and the system comprising:

a detection means (10 in Fig. 3) for detecting a reception error rate of a received signal from the mobile station;

a comparison means (11 in Fig. 3) for comparing the detected reception error rate and a predetermined target reception error rate;

a correction means (12 in Fig. 2; 308, 314 in Fig. 3) for correcting the ratio between the target received signal power value and the interference power value, or the target reception power based on the result of the comparison;

a control means (7, 13 in Fig. 3) for setting a transmission control signal so that the transmission power of the mobile station can be controlled to a predetermined target value, based on the corrected ratio between the target received signal power value and the interference power value, or based on the target reception power value;

a transmission means (14-18, 2, 1 in Fig. 3) for transmitting the set control signal to the mobile station; and

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a transmission power control means (19, 20 in Fig. 3) for analyzing the received control signal from the base station, and controlling the transmission power based on the result of the analysis.

Regarding claim 9, Dohi et al. teaches a base station controlling transmission power of a transmitting signal from a mobile station by a wide-band spread transmission (Fig. 3, claim 1), and the base station comprising:

a detection means (11 in Fig. 3) for detecting a reception error rate of a received signal;

a comparison means (304 in Fig. 3) for comparing the detected reception error rate and a predetermined target reception error rate;

a correction means (12 in Fig. 3) for correcting the ratio between the target received signal power value and the interference power value, or the target reception power based on the result of the comparison;

a control means (7, 13 in Fig. 3) for setting a transmission control signal so that the transmission power of the mobile station can be controlled to a predetermined target value, based on the corrected ratio between the target received signal power value and the interference power value, or based on the target reception power value; and

a transmission means (14-18, 2, 1 in Fig. 1) for transmitting the set control signal to the mobile station.

Regarding claim 10, Dohi et al. teaches a mobile station controlling transmission power of a transmitting signal from a base station by a wide-band transmission, and the mobile station comprising:

a control signal outputted from the base station of claim 9 above,
an extract means (19 in Fig. 3) for analyzing the outputted control signal transmitted from the base station and extracting a transmission power control information included in the control signal; and

a transmission power control means (20 in Fig. 3) for controlling the transmission power so that the transmission power can be controlled to a predetermined transmission target value based on the extracted power control information.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kayama et al. (U.S. Patent No. 6,771,978), Engstrom et al. (U.S. Patent No. 6,639,934), Miyamoto (U.S. Patent No. 6,628,924).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chieh M Fan whose telephone number is (571) 272-3042. The examiner can normally be reached on Monday-Friday 8:00AM-5:30PM, Alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on (571) 272-3056. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

A handwritten signature in black ink, appearing to read "Chieh M Fan". The signature is fluid and cursive, with the first name "Chieh" and last name "Fan" clearly distinguishable, followed by a stylized initial or surname.

Chieh M Fan
Primary Examiner
Art Unit 2634

cmf
September 19, 2004